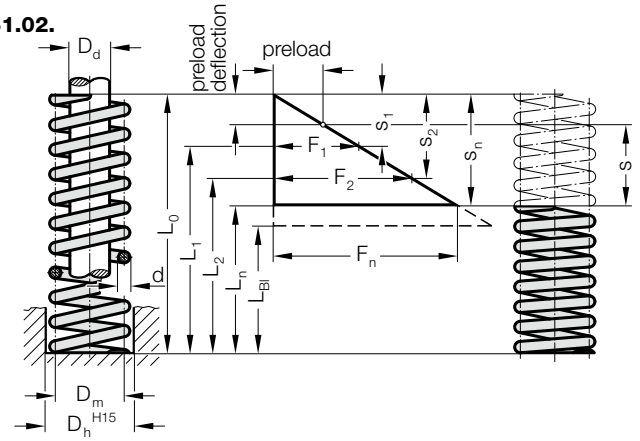
ROUND WIRE COMPRESSION SPRING

241.02.



Material:

Spring steel wire class C DIN 17.223 sheet 1, drawn and patented.
For highly stressed compression springs and for loads both static and oscillating.

Execution:

Manufacturing tolerances to DIN 2095 class 2, load-stabilized, surface homogenized by ball-shot, oiled.
Flattened and ground end coils.

Note:

Max. working temperature 100 °C.
All spring sizes listed also available in “making-up-”lengths of 500 mm. When ordering these, please add “500” at the end of the order number – e. g. 241.02.11.040.500.

D_h = diameter of guide sleeve
D_m = mean coil diameter
D_d = diameter of guide pin
d = diameter of spring wire
L_0 = free length of spring
L_1...L_n = lengths of loaded spring as related to spring forces F_1...F_n
R = spring rate [N/mm]
L_{Bl} = length of compacted spring (i.-e. wire-to-wire)
F_1...F_n = forces [N] as related to lengths of spring L_1...L_n
s_1...s_n = deflection as related to spring forces F_1...F_n
i_f = number of active coils
s = working stroke of spring – i. e. working deflection

241.02. Round wire compression spring

Order No	D_h	D_d	D_m	d	L_0	R	s_1	F_1 [N]*	l_1	s_2	F_2 [N]**	l_2	s_n	F_n [N]***	L_n	i_f
241.02.11.040	11	6.5	8.5	1.5	40	8.08	11.3	91	28.7	13.7	110	26.3	16.1	130	23.9	10.5
241.02.13.055	13	8.5	10.5	1.5	55	3.8	20.8	79	34.2	25.2	95	29.8	29.7	112	25.3	12
241.02.15.040	15	9.5	12	2	40	11.93	12.3	146	27.7	15	178	25	17.6	210	22.4	8
241.02.15.050	15	9.5	12	2	50	10	17.5	175	32.5	21.2	212	28.8	25	250	25	9.5
241.02.16.040	16	10.5	13	2	40	11	14	154	26	17	187	23	20	220	20	7
241.02.18.085	18	12	14.75	2.25	85	5.92	30.8	182	54.2	37.4	221	47.6	44	260	41	14
241.02.19.045	19	11	14.5	3	45	35	9.8	343	35.2	11.9	416	33.1	14	490	31	8
241.02.19.050	19	11	14.5	3	50	30	11.2	336	38.8	13.6	408	36.4	16	480	34	8.5
241.02.19.083	19.5	9	14	4	83	75	12.6	945	70.4	15.3	1,147	67.7	18	1,350	65	16
241.02.20.035	20.5	10	15	4	35	170	5.6	952	29.4	6.8	1,156	28.2	8	1,360	27	4.5
241.02.20.090	20.5	9	14.5	4.5	90	97.8	12.3	1,202	77.7	15	1,467	75	17.6	1,714	72.4	4
241.02.21.035	21	13.5	17	2.5	35	13.32	10.5	139	24.5	12.7	169	22.3	15	200	20	6
241.02.21.040	21	12	16.25	3	40	32.1	9.8	314	30.2	11.9	381	28.1	14	450	26	5.5
241.02.22.095	22	14.5	18	2.5	95	4.1	34.2	140	60.8	41.5	170	53.5	48.8	200	46.2	17
241.02.22.040	22.5	12	17	4	40	105.5	7.7	812	32.3	9.3	981	30.7	11	1,160	29	5
241.02.23.045	23	14.5	18.5	3	45	25.7	15	385	30	18.2	467	26.8	21.4	550	23.6	5
241.02.23.050	23	12.5	17.5	4	50	74.3	11	817	39	13.3	988	36.7	15.6	1,160	34.4	6.5
241.02.26.024	26.5	16	21	4	24	133.2	5	666	19	6.1	812	17.9	7.2	960	16.8	2
241.02.30.070	30	13	20.8	7	70	341	7.7	2,625	62.3	9.3	3,171	60.7	11	3,750	59	8
241.02.32.070	32	21	26	4	70	24.2	23.8	575	46.2	28.9	700	41.1	34	822	36	6
241.02.32.150	32	16	23.5	6.5	150	103.6	19.6	2,030	130.4	23.8	2,465	126	28	2,900	122	14
241.02.34.125	34	19	26	6	125	67.2	22.4	1,505	102.6	27.2	1,827	97.8	32	2,150	93	11.5
241.02.44.130	44	25	34	8	130	108.2	25.2	2,726	104.8	30.6	3,310	99.4	36	3,895	94	10
241.02.44.200	44	25	34	7.5	200	61.8	43.4	2,679	156.6	52.7	3,254	147.3	62	3,847	137.7	17
241.02.48.067	48	25	36	10	67	640	6.3	4,032	60.7	7.6	4,864	59.4	9	5,760	58	3.5
241.02.49.050	49	29	38.5	8.5	50	337	7.7	2,594	42.3	9.3	3,134	40.7	11	3,707	39	2.5
241.02.55.200	55	30	42	11	200	157	30.1	4,725	169.9	36.6	5,746	163.4	43	6,750	157	13
241.02.58.050	58	39	48	8	50	151.2	9.8	1,481	40.2	11.9	1,799	38.1	14	2,117	36	2.5
241.02.63.180	63	38	50	11	180	121	30.1	3,642	149.9	36.6	4,428	143.4	43	5,203	137	10

* = long spring life; ** = medium spring life; *** = max. spring loading